

Applicant : Christopher Lynn Tycho Brown
Serial No. : 10/713,853
Filed : November 14, 2003
Page : 9 of 18

Attorney's Docket No.: 16666-002001

REMARKS

Claims 1-37 are pending, with claims 1, 17, 24, and 36 being independent. Claims 6 and 37 have been cancelled by this amendment without prejudice. Claims 1, 12, and 36 have been amended. No new matter has been added. Reconsideration and allowance of the above-referenced application are respectfully requested.

Allowable Subject Matter:

The indication of allowable subject matter in claims 22, 25, 27-29, 31-35, and 37 is acknowledged and appreciated. The claims are retained, and the right to rewrite these claims in independent form at a later date is reserved.

Claims 12-15 are not addressed by the Office Action. Claim 12 should be allowable at least for the same reason as claim 22. Claim 12 has been amended to be in independent form. Claims 13-16 depend from claim 12, and the rejection of claim 16 under 35 U.S.C. § 112 is addressed below. Thus, claims 12-16 should be in condition for allowance.

Interview Summary:

Examiner Kaushikkumar M. Patel is thanked for the interview, which was conducted with Applicant's representative, Mr. Hunter, on April 20, 2006. During the interview, claims 1 and 12, and the Puryear reference (U.S. Pat. App. No. 2006/0005201) were discussed. No substantive arguments were presented as Applicant's representative was attempting to understand the logic underlying the current Office Action, and Examiner Patel (who was only recently assigned to this case) was only partially familiar with the Office Action. The proper scope of statutory subject matter was briefly discussed. Also, Mr. Hunter asked that Examiner Patel make the Puryear reference officially of record by supplying a substitute 892 form. No agreement was reached.

Applicant : Christopher Lynn Tycho Brown
Serial No. : 10/713,853
Filed : November 14, 2003
Page : 10 of 18

Attorney's Docket No.: 16666-002001

Rejection Under 35 U.S.C. § 101:

Claim 1 stands rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. This contention is respectfully traversed.

The Office Action asserts that the present specification defines a machine-readable medium in ¶ 18 as non-statutory subject matter, and then states, "Software products, computer program products and machine-readable signals are not patentable subject matter." (See Office Action at page 2.) First, attention is called to the actual language of the present specification:

As used herein, the term "machine-readable medium" refers to any software product, computer program product, apparatus and/or device used to provide machine instructions and/or data to the machine 100, including a machine-readable medium that receives machine instructions as a machine-readable signal.

Examples of a machine-readable medium include the medium 135 and the memory 120. The term "machine-readable signal" refers to any signal, such as the signals 154, used to provide machine instructions and/or data to the machine 100. The term "storage device" refers to any apparatus having a machine-readable medium suitable for prolonged storage of data and/or code. (See Specification at ¶ 18; emphasis added.) As clearly indicated above, ¶ 18 does not define a machine-readable medium as including a machine-readable signal, but rather as including a machine-readable medium that receives machine instructions as a machine-readable signal.

Second, there is no basis for asserting that software products and computer program products are *per se* non-statutory. Attention is called to claim 26 of issued U.S. Patent No. 6,526,523 to Chen (cited by the Examiner in the Office Action) which is directed to a computer program. Moreover, numerous issued U.S. Patents include claims directed to computer program products and software products. Examples of such U.S. Patents can be provided upon request.

The Examination Guidelines for Computer-Related Inventions, as set forth in MPEP 2106, make clear that, "a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's

Applicant : Christopher Lynn Tycho Brown
Serial No. : 10/713,853
Filed : November 14, 2003
Page : 11 of 18

Attorney's Docket No.: 16666-002001

functionality to be realized [...] is [...] statutory.” (See MPEP2106.IV.B.1(a).) Claim 1 clearly falls within this category of statutory subject matter.

In addition, claim 1 reads as follows: “An article comprising a machine-readable medium embodying information indicative of instructions that when performed by one or more machines result in operations comprising: [...]” Section 101 of title 35, United States Code, provides: “Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” An article comprising a machine-readable medium, as claimed, is clearly a new and useful manufacture or improvement thereof. “In choosing such expansive terms as ‘manufacture’ and ‘composition of matter,’ modified by the comprehensive ‘any,’ Congress plainly contemplated that the patent laws would be given wide scope. The relevant legislative history also supports a broad construction.” (See MPEP 2106(IV)(A), citing *In Chakrabarty*, 447 U.S. at 308-309, 206 USPQ at 197.) The plain language of claim 1, read in view of the specification, clearly defines a new and useful manufacture, which causes one or more machines to perform operations that provide utility in a real-world context. Hence this claim is clearly limited to a practical application in the technological arts, and as such, represents statutory subject matter. (See MPEP 2106(IV)(B)(2)(b)(ii).)

Moreover, the Office Action’s failure to provide any authority for the 35 U.S.C. § 101 rejection makes the rejection clearly deficient. Attention is called to the fact that the Examination Guidelines for Computer-Related Inventions, as set forth in MPEP 2106, “do not constitute substantive rule-making and hence do not have the force and effect of law. These Guidelines have been designed to assist Office personnel in analyzing claimed subject matter for compliance with substantive law. Rejections will be based upon the substantive law and it is these rejections which are appealable.” (See MPEP 2106(I); emphasis added.) In the current Office Action, no citations to the substantive law have been provided in support of the rejection under 35 U.S.C. § 101, and thus this rejection is clearly deficient. In view of the above, withdrawal of the rejection under 35 U.S.C. § 101 is respectfully requested.

Applicant : Christopher Lynn Tycho Brown
Serial No. : 10/713,853
Filed : November 14, 2003
Page : 12 of 18

Attorney's Docket No.: 16666-002001

Rejection Under 35 U.S.C. § 112:

Claims 1, 16, 23, and 30 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. This contention is respectfully traversed.

With respect to claim 1, the Office Action asserts that the term "information indicative of instructions" has unclear meaning. (See Office Action at page 3.) This language should be clear to one skilled in the field. Nonetheless, in order to expedite prosecution, the preamble of claim 1 has been amended to delete the words "information indicative of". Thus, withdrawal of the rejection of claim 1 under 35 U.S.C. § 112 is respectfully requested.

With respect to claims 16, 23, and 30, the specification clearly provides a standard for ascertaining the meaning of the phrase "small packet", such that one of ordinary skill in the art would be reasonably apprised of the scope of the claimed subject matter. The specification clearly states, "Small packets can be used to reduce transmission and processing latencies, resulting in better performance for live analysis." (See Specification at ¶ 36.) The specification then goes on to provide a very detailed example packet structure that can be used efficiently over multiple transports. (See Specification at ¶s 36-50 and Figs. 6-24.) In view of the provided detailed example of the claimed "small packets", claims 16, 23, and 30 are definite as written. Thus, withdrawal of the rejection of claims 16, 23, and 30 under 35 U.S.C. § 112 is respectfully requested.

Rejection Under 35 U.S.C. § 102:

Claims 1, 3-6, 8-10, and 36 stand rejected under 35 U.S.C. 102(b) as allegedly being anticipated by U.S. Pre-Grant Publication 2002/0133702 (Stevens). This contention is respectfully traversed.

Independent claim 1 has been amended to include the feature of cancelled claim 6. Thus, claim 1 now recites, "determining whether a storage device, in a data processing system running an operating system, includes a protected area, the operating system including a hardware abstraction layer; removing the storage area protection of the storage device from within the

Applicant : Christopher Lynn Tycho Brown
Serial No. : 10/713,853
Filed : November 14, 2003
Page : 13 of 18

Attorney's Docket No.: 16666-002001

running operating system and without rebooting the data processing system; and providing information derived from the formerly protected storage area to a data processing system detection tool; wherein said determining and said removing occur in a kernel mode of the data processing system." As described in a detailed example in the specification:

The OS 220 can include a kernel that handles memory management, process and task management, and disk management. [...]

To assist law enforcement and information security personnel in determining if a user has utilized the protected area 212 to hide contraband or malware, a kernel-mode software module 230 can be used to provide access to the protected area 212 and enable live imaging and analysis of the protected area 212 from within the running operating system 220 and without rebooting the data processing system 200. [...]

The kernel-mode software module 230 can be a device driver (e.g., a Windows Driver Model (WDM) driver). The software module 230 can be loaded into memory by a detection application 240, and the software module 230 can provide a detection tool with access to the protected area 212. [...]

Thus, the software module 230 and the detection application 240 can provide direct and live access to the protected storage area 212 in order to image or analyze the protected storage area 212 in support of some detection function. The software module 230 and the detection application 240 enable direct access to the protected storage area live from the high level operating system without the need to reboot. In effect, the kernel-mode software module 230 operates as a broker for the detection application 240, providing direct hardware access to the user-mode application despite the hardware abstraction layer 222. Moreover, the removal of the protected storage area 212 (i.e., the removal of the protection) can be done volatily so the protection can be restored by the next system reboot, leaving the storage device 210 unaltered.

(See Specification at ¶s 19, 21, 22, and 23; and Fig. 2.)

Applicant : Christopher Lynn Tycho Brown
Serial No. : 10/713,853
Filed : November 14, 2003
Page : 14 of 18

Attorney's Docket No.: 16666-002001

In contrast, Stevens describes methods for granting access to a protected area, such as a hard disk drive of a computer, after the computer has been booted, by introducing BIOS (Basic Input/Output System) modules that may be accessed after the computer is in normal operation. (See e.g., Stevens at ¶s 8-9, 19, 45-46, 48-49, and 53.) Stevens' use of BIOS modules is very different than the use of a kernel mode of a data processing system, as is readily understood by those skilled in the art.

In the rejection of claim 6, the Office Action asserts that, "it is inherent to the system disclosed by Stevens that these processes occur in kernel-mode because accessing hardware communicatively attached to the processing system requires the use of the drivers loaded into the kernel of the operating system." (See Office Action at page 5.) This assertion is incorrect, as Stevens clearly describes the use of BIOS modules, not a driver loaded into the kernel of the operating system. The Office Action fails to providing any rationale or evidence to support its assertion of inherency, as is required. (See MPEP 2112.IV.) Thus, in view of the above, independent claim 1 should be in condition for allowance.

Dependent claims 3-5, 7, and 8-10 should be patentable based on the above arguments and the additional recitations they contain. For example, the subject matter of claim 7 is not even addressed in the current Office Action. Additionally, the subject matter of claims 8 and 10 is not adequately addressed in the current Office Action.

Claim 8 recites, "scanning the formerly protected storage area; and identifying file system information in the formerly protected storage area." Claim 10 recites, "wherein the operations further comprise reconstructing a file system of the formerly protected storage area to derive the information." For both of these claims, the Office Action merely refers to ¶ 81 of Stevens, which states, "The directory function returns a list of available services by filling a buffer provided by the calling application or process." As clearly described in Stevens, the "directory function" is "a retrieve service area directory function." (See e.g., Steven at ¶s 15 and 69-70.) Thus, the directory function of Stevens does not anticipate the subject matter of claims 8 and 10.

Applicant : Christopher Lynn Tycho Brown
Serial No. : 10/713,853
Filed : November 14, 2003
Page : 15 of 18

Attorney's Docket No.: 16666-002001

Finally, independent claim 36 has been amended to include the allowable subject matter of claim 37. Thus, claim 36 is in condition for allowance.

Rejections Under 35 U.S.C. § 103:

Claim 2 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Stevens in view of U.S. Pre-Grant Publication 2005/0262342 (Field). Claim 11 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Stevens in view of U.S. Pre-Grant Publication 2005/0193115 (Chellis et al.). These contentions are respectfully traversed.

Claims 2 and 11 depend from an allowable base claim for the reasons addressed above. Thus, claims 2 and 11 should be in condition for allowance for at least this reason. In addition, with respect to claim 11, a *prima facie* case of obviousness has not been established, because the feature of claim 11 ("wherein providing the information derived from the formerly protected storage area further comprises selecting the transport medium from a group including a peripheral device interface medium and a network communications medium") is not present in Chellis, and the cited portion of Chellis (§ 84) does not provide a motivation to combine Chellis with Stevens. Thus, claims 2 and 11 should be in condition for allowance.

Claims 17-20, 24, and 26 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Stevens in view of U.S. Pre-Grant Publication 2006/005201 (Puryear). Claim 21 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Stevens in view of Puryear and U.S. Pre-Grant Publication 2002/0133714 (Sales). These contentions are respectfully traversed.

Independent claim 17 recites, "loading a kernel-mode software module in a computing system running an operating system; and without rebooting the computing system, using the kernel-mode software module to perform operations from within the operating system, the operations comprising determining whether a storage device in the computing system includes a protected area, and reversibly removing the storage area protection." For the reasons addressed above in connection with claim 1, Stevens does not teach using a kernel-mode software module

Applicant : Christopher Lynn Tycho Brown
Serial No. : 10/713,853
Filed : November 14, 2003
Page : 16 of 18

Attorney's Docket No.: 16666-002001

to perform operations from within an operating system as claimed. Thus, claim 17 should be in condition for allowance for at least this reason.

In addition, a *prima facie* case of obviousness has not been established because no motivation to combine Puryear with Stevens has been provided. Puryear describes, "An extensible kernel-mode audio (e.g., MIDI) processing architecture is implemented using multiple modules that together comprise a module graph. The module graph is implemented in kernel-mode, reducing latency and jitter when handling audio data by avoiding transfers of the audio data to user-mode applications for processing." See Puryear at Abstract. Since Puryear is directed to an entirely different technical problem than Stevens, and since no evidence of a motivation to combine Puryear with Stevens has been provided, a *prima facie* case of obviousness has not been established.

In order to establish a *prima facie* case of obviousness under 35 U.S.C. §103(a), the Examiner must provide particular findings as to why the two pieces of prior art are combinable. See *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ 2d 1614, 1617 (Fed. Cir. 1999). Broad conclusory statements standing alone are not evidence. Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability--the essence of hindsight reconstruction. See *In re Dembiczak*, 50 USPQ2d at 1617. Attention is called to *In re Lee*, 277 F.3d 1338 (Fed. Cir. 2002), in which the Federal Circuit vacated a Patent Office Board affirmance of an obviousness rejection because, rather than relying on objective evidence, the Patent Office based its obviousness rejection on conclusory statements having no evidentiary support in the record. *Id.* at 1342-43. In doing so, the Federal Circuit made it abundantly clear that "subjective belief and unknown authority" and "[a]ssertions of] common knowledge and common sense" are not "a substitute for evidence." *Id.* at 1343-44.

In view of the above, independent claim 17 should be in condition for allowance. Dependent claims 18-21 should be patentable based on the above arguments and the additional recitations they contain. For example, with respect to claim 21, a *prima facie* case of obviousness has not been established, because the feature of claim 21 ("sending information

Applicant : Christopher Lynn Tycho Brown
Serial No. : 10/713,853
Filed : November 14, 2003
Page : 17 of 18

Attorney's Docket No.: 16666-002001

derived from the formerly protected storage area over a selected transport medium to a data processing system detection tool") is not present in Sales, and the cited portion of Sales (§ 31) does not provide a motivation to combine Sales with Stevens.

Independent claim 24 recites, "a data processing system detection tool; and a kernel-mode software module operable to provide the detection tool with access to a protected area of a storage device in a data processing system when the kernel-mode software module is loaded into the data processing system." Based on the above arguments, independent claim 24 should be in condition for allowance. Dependent claim 26 should be patentable based at least upon the above arguments.

Conclusion

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific issue or comment does not signify agreement with or concession of that issue or comment. Because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

It is respectfully suggested for all of these reasons, that the current rejections are overcome, that none of the cited art teaches or suggests the features which are claimed, and therefore that all of these claims should be in condition for allowance. A formal notice of allowance is thus respectfully requested.

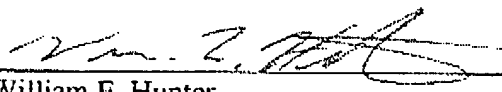
Applicant : Christopher Lynn Tycho Brown
Serial No. : 10/713,853
Filed : November 14, 2003
Page : 18 of 18

Attorney's Docket No.: 16666-002001

Please apply the extra independent claim fee, and any other necessary charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: April 20, 2006



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